Application No. 10/553,866 Amendment dated October 20, 2008

Reply to Office Action of June 26, 2008

Docket No. 0091-0247PUS1 Art Unit: 4112

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**AMENDMENTS TO THE DRAWINGS** 

The attached sheets of drawings include proposed amendment to Figs. 2, 3, and 5c.

In Fig. 2, the dotted line incorrectly labeled as 30 is replaced by 32.

In Fig. 3, the missing element 41 (broken line indicating an edge) has been added to

be consistent with the description in the Specification.

Fig. 5c, the portion of the sealing element having a width w incorrectly labeled as 57'

has been replaced by 57", to be consistent with the description in the Specification.

Attachment: Replacement sheets

Annotated Sheets showing the changes

## **REMARKS**

The Applicant thanks the Examiner for the thorough consideration given the present application. Claims 1-16 are cancelled herein without prejudice to the subject matter contained therein. Claims 17-31 are pending, each of which is newly added. Claims 17 and 28 are independent.

Antecedent basis for new claims 17-31 can be found in the Specification as filed.

More specifically, antecedent basis of Claims 17 and 28 can be found on page 4, after the drawing description, line 1, to page 5, line 23, on page 6, line 9 to page 7, line 5, and original claim 5.

Antecedent basis of Claim 18 can be found on page 5, lines 13-17.

Antecedent basis of Claim 19 can be found on page 5, lines 17-24.

Antecedent basis of Claim 20 can be found on page 5, lines 28-30.

Antecedent basis of Claim 21 can be found on page 5, lines 8-9.

Antecedent basis of Claim 22 can be found in Figs. 1a and 1b.

Antecedent basis of Claim 23 can be found on page 7, line 23 to page 8, line 4, and Figs. 5a-5c.

Antecedent basis of Claim 24 can be found on page 8, lines 10-15.

Antecedent basis of Claim 25 can be found on page 6, line 9 to page 7, line 5.

Antecedent basis of Claim 26 can be found on page 6, lines 1-6.

Antecedent basis of Claim 27 can be found on page 8, line 21 to page 9, line 4, page 7, line 23 to page 8, line 4, and Figs. 6, 2, and 5a-5c.

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Antecedent basis of Claim 29 can be found on page 5, lines 13-24.

Antecedent basis of Claims 30-31 can be found on page 6, lines 9-21, and lines 1-6.

Applicant submits that no new matter is introduced by the amendment.

The Examiner is respectfully requested to reconsider the rejections in view of the

amendments and remarks set forth herein.

Examiner Interview

If, during further examination of the present application, a discussion with the

Applicant's Representative would advance the prosecution of the present application, the

Examiner is encouraged to contact Carl T. Thomsen, Registration No. 50,786, at 1-703-208-

4030 (direct line) at his convenience.

Claim for Priority

The Examiner has acknowledged the Applicant's claim for foreign priority based on

SE 0303151-2 filed on November 26, 2003.

Information Disclosure Citation

The Applicant thanks the Examiner for considering the reference supplied with the

Information Disclosure Statements filed on October 21, 2005 and January 11, 2008, and for

providing the Applicant with initialed copies of the PTO forms filed therewith.

Amendments to the Drawings

The attached sheets of drawings include proposed amendment to Figs. 2, 3, and 5c.

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In Fig. 2, the dotted line incorrectly labeled as 30 is replaced by 32.

In Fig. 3, the missing element 41 (broken line indicating an edge) has been added to

be consistent with the description in the Specification.

Fig. 5c, the portion of the sealing element having a width w incorrectly labeled as 57'

has been replaced by 57", to be consistent with the description in the Specification.

The antecedent basis of the amendment can be found on page 6, line 13; on page 6, on

lines 22-27; and on page 8, lines 10-15.

No new matter has been added.

Claim Objections

The Examiner has objected to claim 16 as allegedly being of improper form. In order

to overcome this objection, the Applicants has cancelled claim 16. Reconsideration and

withdrawal of this objection are respectfully requested.

Rejection Under 35 U.S.C. § 112, second paragraph

Claims 1-5, 8, and 9 stand rejected under 35 U.S.C. § 112, second paragraph. This

rejection is respectfully traversed.

In order to overcome this rejection, original claims 1-16 have been replaced by new

claims 17-31. The new claims correct each of the deficiencies specifically pointed out by the

Examiner, by eliminating the terms "scraper means" and "other of said bodies" from the

claims, and by providing the proper antecedent basis for the claimed elements.

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The Applicant respectfully submits that the claims, as amended, particularly point out

and distinctly claim the subject matter which the Applicant regards as the invention.

Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Rejections Under 35 U.S.C. §102(e)

Claims 1-5, 8, and 9 stand rejected under 35 U.S.C. §103(a) as being anticipated by

Renaud et al. (U.S. 2003/0099577).

This rejection is respectfully traversed.

Claims 1-4, 6-7 and 12-15 have been cancelled. Applicant's response is with regard

to new Claims 17-31.

Claims 17 and 28 are independent claims, and claims 18-27 and 29-31 are dependent

claims of claims 17 and 28, respectively.

As positively recited in the new independent claims 17 and 28, Applicant's claimed

sample volume defining device includes a first body having at least one cavity with a defined

volume on a surface of the first body, the cavity having an open end and an opposing closed

end; the first body being slidable between a first location and a second location; and a second

body having a pair of channels extending through the second body, each channel having an

opening on a surface of the second body abutting against the first body and an opposing

opening; when the first body being in the second location, the pair of channels being in fluid

communication with the cavity of the first body; wherein when the first body is slid from the

first location to the second location, the device enables directing a flow of a diluting fluid

from one of the channels to flush the liquid sample retained in the cavity through another of

the channels to form a diluted sample.

Applicant submits that the claimed subject matter is not disclosed, taught or suggested

by the art of record.

More specifically, Renaud et al. fail to teach Applicant's claimed device including a

first body having a cavity that has an open end and an opposing closed end on a surface of a

first body. On the contrary, the Renaud et al. document teaches a capillary duct having first

and second open ends, where the second open end functions as an ejection nozzle for

dispensing the sample isolated in the capillary duct (see Figs. 1A-1D and Fig. 3, and

paragraphs 0041, 0053 and 0056).

The Renaud et al. document further fails to teach Applicant's clamed device that

includes a second body having a pair of channels extending through the second body, each

channel having an opening on the surface of the second body abutting against the first body

and an opposing opening, when the first body being in the second location, the pair of

channels being in fluid communication with the cavity of the first body. In the embodiment

shown in Fig. 3 of Renaud et al., piston 50, as construed as the second body by the Examiner,

does not have any channel; and at its second position shown in Fig. 3, no any fluid

communication between the second body and the cavity of the first body to enable diluting

the sample in the cavity through the channels in the second body.

Therefore, the reference fails to anticipate or suggest Applicant's claimed invention.

Accordingly, Applicant respectfully requests withdrawal of the rejection under upon

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35 U.S.C. §102(e).

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Rejection under 35 U.S.C. §103(a)

Claims 5 and 8-11 stand rejected under 35 USC §103(a) as being unpatentable over

Renaud et al. (US 2003/0099577), and over Renaud et al. in view of Fawcett (US Patent No.

6,240,984), respectively. These rejections are respectfully traversed.

Claims 5 and 8-11 have been cancelled. Applicant's response is with regard to new

Claims 17-31.

Applicant submits that nothing in the art of record teaches or suggests the subject

matter positively recited in the new independent claims 17 and 28.

Applicant points out that the Renaud et al. document teaches away from Applicant's

claimed device and the method defined in Claims 17 and 28.

First, as discussed above, Renaud et al. specifically teach a device having a capillary

duct having first and second open ends and a method that relies on the second open end to

function as an ejection nozzle for dispensing the sample isolated in the capillary duct. This is

exactly opposite of Applicant's claimed device that requires the cavity having a closed end,

so that the sample retained in the cavity can't be dispensed through the first body, rather it

can only be delivered through the channels of the second body.

Second, as further discussed above, in the embodiment shown in Fig. 3 of Renaud et

al., piston 50 is construed as the second body by the Examiner. As shown, piston 50 does not

include any channels.

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More importantly, in order for the Renaud et al. device to function, at the second

position (Renaud et al.'s "liquid separation and ejection configuration"), piston 5 must pass

the capillary duct to allow the air pressure to be applied to the sample isolated in the capillary

duct. This is contrary to Applicant's claimed invention, which relies on the alignment of the

pair of channels extending through the second body with the cavity of the first body at the

second position, to enable directing or providing a flow of a diluting fluid from one of the

channels to flush the liquid sample retained in the cavity through another of the channels to

form a diluted sample.

Therefore, it is apparent to those having ordinary skill in the art that the structure of

the Renaud et al. device and the mechanism of their method are fundamentally different from

the instant invention. As such, Renaud et al. fail to teach or render obvious of Applicant's

claimed invention as defined by independent claims 17 and 28.

With regard to the sealing element, it is further defined in claims 23, 24 and 27, which

are dependent claims from independent claim 17. Since independent claim 17 is not obvious,

claims 23, 24 and 27 are submitted as being allowable over the art of record.

Accordingly, Applicant respectfully requests withdrawal of the rejection under upon

35 U.S.C. §103(a).

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## **CONCLUSION**

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. It is believed that a full and complete response has been made to the outstanding Office Action, and that the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, he is invited to telephone Carl T. Thomsen (Reg. No. 50,786) at (703) 208-4030 (direct line).

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,

Date: October 20, 2008

JMS:CTT:ktp

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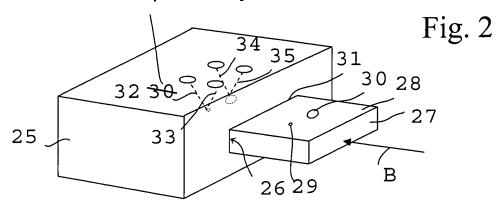
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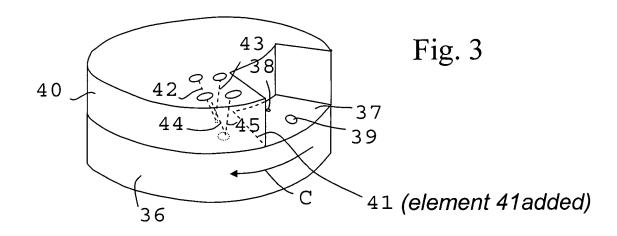
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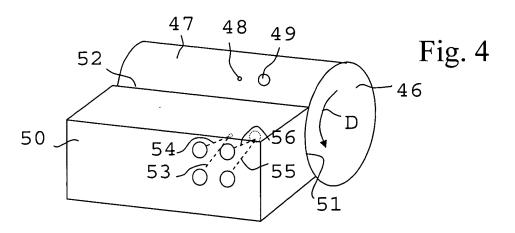
App No.: 10/553,866 Docket No.: 0091-0247PUS1 Inventor: Ingemar BERNDTSSON
Title: A METHOD AND A DEVICE FOR DEFINING A SMALL VOLUME OF A LIQUID SAMPLE
ANNOTATED SHEET

2/5

## 30 is replaced by 32







Title: A METHOD AND A DEVICE FOR DEFINING A SMALL **VOLUME OF A LIQUID SAMPLE** ANNOTATED SHEET 3/525 22 Fig. 5a 21 23 60 13 11 14' 10 12 57 59 Fig. 5b 13 14′ changed to 57" 58 59′ Fig. 5c 13 60 61 57 W 57′ 12 10 62 63 Fig. 6 64 W1W2 62' 62" 29 30 d2

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